



OFFICIAL STUDY GUIDE 2001 EDITION



Visit our website at www.collegeboard.com/clep

COLLEGE-LEVEL EXAMINATION PROGRAM

Principles of Microeconomics

Description of the Examination

The Subject Examination in Principles of Microeconomics covers material that is usually taught in a one-semester undergraduate course in the principles of microeconomics. This aspect of economics deals with the principles of economics that apply to the behavior of groups, organizations, and individuals within the larger economic system. Questions on the exam require candidates to apply analytic techniques to hypothetical situations and to analyze and evaluate government policies on the basis of simple theoretical models. The exam emphasizes analytical capabilities rather than a factual understanding of United States institutions and policies.

The exam consists of approximately 80 multiple-choice questions to be answered in two separately timed 45-minute sections.

Knowledge and Skills Required

Questions on the Principles of Microeconomics exam require candidates to demonstrate one or more of the following abilities.

- Understanding of important economic terms and concepts
- Interpretation and manipulation of economic graphs
- Interpretation and evaluation of economic data
- Application of simple economic models

The outline below indicates the material covered by the exam and the approximate percentage of questions in each category.

Approximate Percent of Examination

8-12% Basic economic concepts

Scarcity: nature of economic systems

Opportunity costs and production possibilities

Comparative advantage

Approximate Percent of Examination

60-70% The nature and function of the product market

Supply and demand (15-20%)

Price and quantity demanded

Basic implementation of policy

Consumer demand (10-15%)

Consumer choice: utility and demand theory

Elasticity

Firm's production, costs, and revenue (10-15%)

Marginal product and diminishing returns

Total, average, and marginal costs and revenue

Long-run costs and economies of scale

Profit maximization: pricing, revenue, and output both in the long run and the short run and in the firm and the market (25-30%)

Perfect competition

Imperfect competition

Monopoly

Oligopoly and monopolistic competition

Efficiency and antitrust (4-6%)

10-15% Factor Market

Derived demand

Determination of wages and other factor prices

Distribution of income

4-6% Market failures and the role of government

Externalities

Public goods

Sample Questions

The 39 sample questions that follow are similar to questions on the Principles of Microeconomics exam, but they do not appear on the actual exam. CLEP exams are designed so that average students completing a course in the subject can usually answer about half the questions correctly.

Before attempting to answer the sample questions, read all the information about the Principles of Microeconomics exam given above. Additional suggestions for preparing for CLEP exams are provided in Chapter 1.

Try to answer correctly as many questions as possible. Then compare your answers with the correct answers, given at the end of this examination guide.

Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case.

Questions 1-2 are based on the following table.

PRODUCTION FUNCTION

(Figures in body of table represent amounts of output.)

Units of		Ţ	Jnits of (Capital			
Labor	1	2	3	4	5	6	
1	141	200	245	282	316	346	
2	200	282	346	400	448	490	
3	245	346	423	490	548	600	
4	282	400	490	564	632	692	
5	316	448	548	632	705	775	
6	346	490	_	692	775	846	

- 1. Information given in the table can be used to illustrate the law of
 - (A) diminishing returns
 - (B) diminishing demand
 - (C) diminishing utility
 - (D) supply and demand
 - (E) comparative advantage

ABCDE

- 2. If there are constant returns to scale throughout the production process, the amount of output that can be produced with 3 units of capital and 6 units of labor must be
 - (A) 490
- (B) 548
- (C) 600
- (D) 608
- (E) 693



- 3. Which of the following best states the thesis of the law of comparative advantage?
 - (A) Differences in relative costs of production are the key to determining patterns of trade.
 - (B) Differences in absolute costs of production determine which goods should be traded between nations.
 - (C) Tariffs and quotas are beneficial in increasing international competitiveness.
 - (D) Nations should not specialize in the production of goods and services.
 - (E) Two nations will not trade if one is more efficient than the other in the production of all goods.
 - ABCDE
- 4. A retail firm planning to increase the price of a product it sells would hope that
 - (A) the good is an inferior good
 - (B) the price of complements would also go up
 - (C) the price of substitutes would go down
 - (D) demand for the product is perfectly price elastic
 - (E) demand for the product is price inelastic
- ABCDE
- 5. If it were possible to increase the output of military goods and simultaneously to increase the output of the private sector of an economy, which of the following statements about the economy and its current position relative to its production possibilities curve would be true?
 - (A) The economy is inefficient and inside the curve.
 - (B) The economy is inefficient and on the curve.
 - (C) The economy is efficient and on the curve.
 - (D) The economy is efficient and inside the curve.
 - (E) The economy is efficient and outside the curve. A B C D E

- 6. Which of the following would necessarily cause a decrease in the price of a product?
 - (A) An increase in population and a decrease in the price of an input
 - (B) An increase in population and a decrease in the number of firms producing the product
 - (C) An increase in average income and an improvement in production technology
 - (D) A decrease in the price of a substitute product and an improvement in production technology
 - (E) A decrease in the price of a substitute product and an increase in the price of an input

- 7. Agricultural price supports will most likely result in
 - (A) shortages of products if the price supports are above the equilibrium price
 - (B) shortages of products if the price supports are at the equilibrium price
 - (C) surpluses of products if the price supports are above the equilibrium price
 - (D) surpluses of products if the price supports are below the equilibrium price
 - (E) a balance between quantity demanded and quantity supplied if the price floor is above the equilibrium price

ABCDE

- 8. The market equilibrium price of home heating oil is \$1.50 per gallon. If a price ceiling of \$1.00 per gallon is imposed, which of the following will occur in the market for home heating oil?
 - I. Quantity supplied will increase.
 - II. Quantity demanded will increase.
 - III. Quantity supplied will decrease.
 - IV. Quantity demanded will decrease.
 - (A) II only
 - (B) I and II only
 - (C) I and IV only
 - (D) II and III only
 - (E) III and IV only

- 9. Assume a consumer finds that her total expenditure on compact discs stays the same after the price of compact discs declines. Which of the following is true for this consumer over the price range?
 - (A) Compact discs are inferior goods.
 - (B) The consumer's demand for compact discs increased in response to the price change.
 - (C) The consumer's demand for compact discs is perfectly price elastic.
 - (D) The consumer's demand for compact discs is perfectly price inelastic.
 - (E) The consumer's demand for compact discs is unit price elastic.

- 10. An improvement in production technology for a certain good leads to
 - (A) an increase in demand for the good
 - (B) an increase in the supply of the good
 - (C) an increase in the price of the good
 - (D) a shortage of the good
 - (E) a surplus of the good

ABCDE

- 11. If the demand for a product is price elastic, which of the following is true?
 - (A) An increase in the product price will have no effect on the firm's total revenue.
 - (B) An increase in the product price will increase the firm's total revenue.
 - (C) A decrease in the product price will increase the firm's total revenue.
 - (D) A decrease in the product price will decrease the firm's rate of inventory turnover.
 - (E) A decrease in the product price will decrease the total cost of goods sold.

(A) (B) (C) (D) (E)

- 12. If an increase in the price of good X causes a decrease in the demand for good Y, good Y is
 - (A) an inferior good
 - (B) a luxury good
 - (C) a necessary good
 - (D) a substitute for good X
 - (E) a complement to good X

- 13. The demand curve for cars is downward sloping because an increase in the price of cars leads to
 - (A) the increased use of other modes of transportation
 - (B) a fall in the expected future price of cars
 - (C) a decrease in the number of cars available for purchase
 - (D) a rise in the prices of gasoline and other oil-based products
 - (E) a change in consumers' tastes in cars



- 14. Suppose that an effective minimum wage is imposed in a certain labor market above the equilibrium wage. If labor supply in that market subsequently increases, which of the following will occur?
 - (A) Unemployment in that market will increase.
 - (B) Quantity of labor supplied will decrease.
 - (C) Quantity of labor demanded will increase.
 - (D) Market demand will increase.
 - (E) The market wage will increase.

- ABCDE
- 15. Suppose that a family buys all its clothing from a discount store and treats these items as inferior goods. Under such circumstances, this family's consumption of discount store clothing will necessarily
 - (A) increase when a family member wins the state lottery
 - (B) increase when a family member gets a raise in pay at work
 - (C) remain unchanged when its income rises or falls due to events beyond the family's control
 - (D) decrease when a family member becomes unemployed
 - (E) decrease when a family member experiences an increase in income



- 16. The primary distinction between the short run and the long run is that in the short run
 - (A) firms make profits, but in the long run no firm makes economic profits
 - (B) profits are maximized, but in the long run all costs are maximized
 - (C) some costs of production are fixed, but in the long run all costs are fixed
 - (D) some costs of production are fixed, but in the long run all costs are variable
 - (E) marginal costs are rising, but in the long run they are constant

Questions 17-19 are based on the table below, which shows a firm's total cost for different levels of output.

<u>Output</u>	Total Cost
0	\$24
1	33
2	41
3	48
4	54
5	61
6	69

- 17. Which of the following is the firm's marginal cost of producing the fourth unit of output?
 - (A) \$54.00
 - (B) \$13.50
 - (C) \$ 7.50
 - (D) \$ 6.00
 - (E) \$ 1.50

- ABCDE
- 18. Which of the following is the firm's average total cost of producing 3 units of output?
 - (A) \$48.00
 - (B) \$16.00
 - (C) \$14.00
 - (D) \$13.50
 - (E) \$ 7.00

19.	Which of the following is the firm's average fixed cost of producing
	2 units of output?

- (A) \$24.00
- (B) \$20.50
- (C) \$12.00
- (D) \$ 8.00
- (E) \$ 7.50

- (A) variable input
- (B) variable input price
- (C) output level
- (D) output price
- (E) fixed cost

- ABCDE
- 21. In the short run, if the product price of a perfectly competitive firm is less than the minimum average variable cost, the firm will
 - (A) raise its price
 - (B) increase its output
 - (C) decrease its output slightly but increase its profit margin
 - (D) lose more by continuing to produce than by shutting down $% \left\{ \mathbf{p}_{i}^{\mathbf{p}}\right\} =\mathbf{p}_{i}^{\mathbf{p}}$
 - (E) lose less by continuing to produce than by shutting down

ABCDE

22. Suppose that the license paid by each business to operate in a city increases from \$400 per year to \$500 per year. What effect will this increase have on a firm's short-run costs?

Marginal Cost	Average Total Cost	Average Variable Cost
(A) Increase	Increase	Increase
(B) Increase	Increase	No effect
(C) No effect	No effect	No effect
(D) No effect	Increase	Increase
(E) No effect	Increase	No effect

ABCDE

^{20.} Marginal revenue is the change in revenue that results from a one-unit increase in the

- 23. Which of the following statements is true of perfectly competitive firms in long-run equilibrium?
 - (A) Firm revenues will decrease if production is increased.
 - (B) Total firm revenues are at a maximum.
 - (C) Average fixed cost equals marginal cost.
 - (D) Average total cost is at a minimum.
 - (E) Average variable cost is greater than marginal cost.

24. If the chemical industry in an area has been dumping its toxic waste free of charge into a river, government action to ensure a more efficient use of resources would have which of the following effects on the industry's output and product price?

	Output	Price
(A)	Decrease	Decrease
(B)	Decrease	Increase
(C)	Increase	Decrease
(D)	Increase	Increase
(E)	Increase	No change



- 25. Assume a perfectly competitive industry is in long-run equilibrium. A permanent increase in demand will eventually result in
 - (A) a decrease in demand because the price will increase and people will buy less of the output
 - (B) a decrease in supply because the rate of output and the associated cost will both increase
 - (C) an increase in price but no increase in output
 - (D) an increase in output
 - (E) a permanent shortage since the quantity demanded is now greater than the quantity supplied



- 26. Economists are critical of monopoly principally because
 - (A) monopolists gain too much political influence
 - (B) monopolists are able to avoid paying their fair share of taxes
 - (C) monopolists are unfair to poor people
 - (D) monopoly leads to an inefficient use of scarce productive resources
 - (E) monopolists cause international political tension by competing with one another overseas for supplies of raw materials
 - ABCDE
- 27. Which of the following statements has to be true in a perfectly competitive market?
 - (A) A firm's marginal revenue equals price.
 - (B) A firm's average total cost is above price in the long run.
 - (C) A firm's average fixed cost rises in the short run.
 - (D) A firm's average variable cost is higher than price in the long run.
 - (E) Large firms have lower total costs than small firms.
 - ABCDE
- 28. A perfectly competitive firm produces in an industry whose product sells at a market price of \$100. At the firm's current rate of production, marginal cost is rising and equal to \$110. To maximize its profits, the firm should change its output and price in which of the following ways?

	Output	<u>Price</u>
(A)	Decrease	Increase
(B)	Decrease	No change
(C)	No change	Increase
(D)	Increase	No change
(E)	Increase	Decrease



- 29. The typical firm in a monopolistically competitive industry earns zero profit in long-run equilibrium because
 - (A) advertising costs make monopolistic competition a high-cost market structure rather than a low-cost market structure
 - (B) the firms in the industry do not operate at the minimum point on their long-run average cost curves
 - (C) there are no significant restrictions on entering or exiting from the industry
 - (D) the firms in the industry are unable to engage in product differentiation
 - (E) there are close substitutes for each firm's product

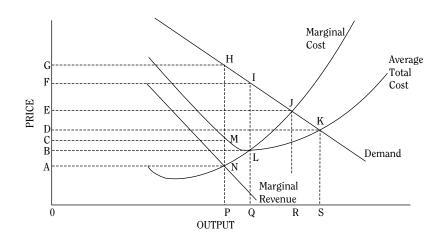


- 30. In the long run, compared with a perfectly competitive firm, a monopolistically competitive firm with the same costs will have
 - (A) a higher price and higher output
 - (B) a higher price and lower output
 - (C) a lower price and higher output
 - (D) a lower price and lower output
 - (E) the same price and lower output



31. Which of the following describes what will happen to market price and quantity if firms in a perfectly competitive market form a cartel and act as a profit-maximizing monopoly?

<u>Price</u>	Quantity	
(A) Decrease	Decrease	
(B) Decrease	Increase	
(C) Increase	Increase	
(D) Increase	Decrease	
(E) Increase	No change	ABCDE



32. The diagram above depicts cost and revenue curves for a firm. What are the firm's profit-maximizing output and price?

(A) 0S 0D (B) 0R 0E (C) 0Q 0F (D) 0Q 0B (E) 0P 0G	(Output	<u>Price</u>
(C) 0Q 0F (D) 0Q 0B	(A)	0S	0D
(D) 0Q 0B	(B)	0R	0E
` '	(C)	0Q	0F
(E) 0P 0G	(D)	0Q	0B
	(E)	0P	0G

- 33. Imperfectly competitive firms may be allocatively inefficient because they produce at a level of output such that
 - (A) average cost is at a minimum
 - (B) price equals marginal revenue
 - (C) marginal revenue is greater than marginal cost
 - (D) price equals marginal cost
 - (E) price is greater than marginal cost





- 34. In a market economy, public goods such as community police protection are unlikely to be provided in sufficient quantity by the private sector because
 - (A) private firms are less efficient at producing public goods than is the government
 - (B) the use of public goods cannot be withheld from those who do not pay for them
 - (C) consumers lack information about the benefits of public goods
 - (D) consumers do not value public goods highly enough for firms to produce them profitably
 - (E) public goods are inherently too important to be left to private firms to produce
 - ABCDE
- 35. Assume that both input and product markets are competitive. If the product price rises, in the short run firms will increase production by increasing
 - (A) the stock of fixed capital until marginal revenue equals the product price
 - (B) the stock of fixed capital until the average product of capital equals the price of capital
 - (C) labor input until the marginal revenue product of labor equals the wage rate
 - (D) labor input until the marginal product of labor equals the wage rate
 - (E) labor input until the ratio of product price to the marginal product of labor equals the wage rate
 - ABCDE

- 36. In which of the following ways does the United States government currently intervene in the working of the market economy?
 - I. It produces certain goods and services.
 - II. It regulates the private sector in an effort to achieve a more efficient allocation of resources.
 - III. It redistributes income through taxation and public expenditures.
 - (A) I only
 - (B) II only
- (C) III only
 - (D) II and III only
 - (E) I, II, and III



- 37. If hiring an additional worker would increase a firm's total cost by less than it would increase its total revenue, the firm should
 - (A) not hire the worker
 - (B) hire the worker
 - (C) hire the worker only if another worker leaves or is fired
 - (D) hire the worker only if the worker can raise the firm's productivity
 - (E) reduce the number of workers employed by the firm
 - ABCDE
- 38. If a firm wants to produce a given amount of output at the lowest possible cost, it should use resources in such a manner that
 - (A) it uses relatively more of the less expensive resource
 - (B) it uses relatively more of the resource with the highest marginal product
 - (C) each resource has just reached the point of diminishing marginal returns
 - (D) the marginal products of each resource are equal
 - (E) the marginal products per dollar spent on each resource are equal
 - (A) (B) (C) (D) (E)

- 39. If the firms in an industry pollute the environment and are not charged for the pollution, which of the following is true from the standpoint of the efficient use of resources?
 - (A) Too much of the industry's product is produced, and the price of the product is too high.
 - (B) Too much of the industry's product is produced, and the price of the product is too low.
 - (C) Too little of the industry's product is produced, and the price of the product is too high.
 - (D) Too little of the industry's product is produced, and the price of the product is too low.
 - (E) The industry is a monopoly.



Study Resources

The study resources suggested for preparing for the Principles of Macroeconomics exam cover both microeconomics and macroeconomics and can be used in preparing for the Principles of Microeconomics exam.

Answers to Sample Questions

Principles of Microeconomics 26. D 1. A 27. A 3. A 28. B 4. E 29. C 30. B 5. A 6. D 31. D 7. C 32. E 8. D 33. E 9. E 34. B 10. B 35. C 11. C 36. E 12. E 37. B 38. E 39. B 13. A 14. A 15. E 16. D 17. D 18. B 19. C 20. C 21. D 22. E 23. D 24. B

25. D